

Quattro™

Multi-Technology Solution



Quattro™ systems supply high purity water for a range of applications.

Nominal flow rates from **500 to 3000 l/hr.**

Basic configuration

- Cartridge filtration - carbon/particulate
- Multi-purpose tank
- RO with SS pressure vessels

Standard Options

Pre RO Options

- Base exchange softeners
- Caustic dosing
- Cartridge filter options: extruded carbon, granular carbon, 5µm pleated
- Monitoring: chlorine, hardness

Post RO Options

- Degasser for CO₂ removal
- CEDI
- Service demineralisation
- PVC or SS pipe work
- UV
- Monitoring options, including TOC
- Outlet control options
- Witnessed FAT

Features & Benefits

- Skid-mounted, pre-assembled, pre-tested; space saving, short lead times, quick start-up
- Microprocessor controller with HMI screen; simple monitoring and operation
- Stainless steel RO vessels with sanitary flow path design
- HMI has secure access keys and alarms; prevents accidental or unauthorized usage
- Integrated Cleaning In Place (CIP) tank; maintains RO membrane performance

Quattro™-S Model

- Designed for the pharmaceutical industry
- Witnessed FAT
- Validation package meets GMP requirements
- Delivered pre-tested & pre-validated

Applications

- Cosmetics
- Industrial laboratories
- Microelectronics
- Boiler feed
- Biotechnology
- Healthcare
- Pharmaceutical products

Related Services

Local after-sales service and support teams offer preventative and corrective maintenance programs to ensure the long-term, efficient operation of installed plant.

Hydrex® Chemicals

Hydrex® 4000 water treatment chemicals from Veolia Water Solutions & Technologies should be used for optimized plant operation.

Quattro™

Equipment Performance

Model		500	1000	2000	3000
Nominal Flow Rates*					
Permeate**	l/hr	500	1000	2000	3000
Feed	l/hr	690	1370	2740	4110
Concentrate	l/hr	190	370	740	1110
Pump Motor Size	kW	3.0	4.0	5.5	7.5
Recovery (maximum***)	%	73			

**Nominal flows are based on operation of RO/CEDI system at 15°C (60°F), SDI<3 and are dependent on feed water quality

**Maximum outlet pressure of 0 - 4 bar (15 - 60 PSI), dependent on the sizing program, site conditions and customer requirements

***With CEDI option and CEDI concentrate recycled

Connections & Dimensions

Model		500	1000	2000	3000
Inlet Union	mm	20	20	25	32
Outlet Union	mm	15	15	20	25
Outlet Triclamp	mm	10	15	20	25
Drain Union	mm	50			

Dimensions		Height	Width	Depth
All models	mm	2060	2250	1300

Material Specifications

Pre RO Pipework	uPVC
Softeners	HDPE and GRP Composite
Cartridge Filter Housing	Polypropylene
Multi-purpose Tank	HDPE
Reverse Osmosis - High Pressure Pipework & Vessels	316L Stainless Steel
Pipework	uPVC
Pipework Option	316L Stainless Steel
Skid	304 Stainless Steel
Control Cabinet	Painted Mild Steel

Feed Water Requirements

General	Potable water free from organics, colloids and suspended matter, SDI<3
Free Chlorine	<0.25 mg/l*
Temperature	5–30°C (45-80°F)
Pressure	4–6 bar (60-90 PSI)

*With activated carbon cartridge filters fitted

Typical Treated Water Quality (RO/CEDI)

Conductivity*	<0.2 µS/cm
Bacteria	<10 cfu/ml (with UV option), <100 cfu/ml (without UV option)
TOC	<500 ppb

*Depends on feed water quality, flow rate & product option selected.

For higher flow rate applications consult your local Veolia Water Solutions & Technologies company, contact details below.

In keeping with the progressive nature of the company, we reserve the right to amend details without notice.

VWS CATALOGUE/Quattro™/AQF0027_EN_V1.2

Visit our website:
www.veoliawaterst.com